

the outer has a distinct fold inferiorly. The surface is marked by somewhat concentric veins.

The branchial system begins on the sixth foot as a process of one or two divisions of considerable length (reaching the terminal third of the dorsal cirrus at the tenth foot), and the organs continue bifid throughout the anterior fragment (Pl. XXXIX. fig. 10). A portion of the posterior region, in the same bottle, shows three divisions in the branchiæ at its anterior end, then two, and finally, towards the tail, only one. The branchiæ have the same character as in the foregoing fragment, and the spines and bristles seem to correspond, but of course there is room for doubt.

The tips of many of the dorsal cirri are much attenuated, and on the whole the organs are elongated. Anteriorly each foot has two strong dark brownish spines; and superiorly a tuft of stout tapering bristles with serrated edges. The brush-shaped forms have a moderately broad tip, with the lateral filament elongated on one side.

The compound or jointed bristles (Pl. XXA. fig. 21) have stout, slightly curved shafts, and the enlarged distal region is boldly serrated. The processes at the tip of the terminal piece are somewhat short; indeed in the majority of the bristles in front the fork is so abraded as to be indistinct. After mounting in Farrant's solution many present a corroded edge, and the usual parts at the tip are indistinguishable. Moreover, it is not always easy to obtain a good lateral view of these bristles, even when perfect.

The inferior hooks (Pl. XXA. fig. 22) present a strong distal process, and a comparatively short and strong inferior fang, which forms a large angle with the former.

In the intestinal pellets of the posterior fragment are brownish pigment-masses, portions of minute Crustacea, and numerous sponge-spicules.

No feature of moment is observed in transverse sections of this form. A well-marked brownish granular area occurs, apparently at intervals, in the upper region of the nerve-area.

*Eunice equibranchiata*, n. sp. (Pl. XXXIX. fig. 11; Pl. XXA. figs. 23, 24).

*Habitat*.—Dredged at Station 122B (off Barra Grande, Brazil, a little south of Pernambuco); lat. 9° 9' S., long. 34° 53' W.; depth, 32 fathoms; surface temperature, 77°·5; sea-bottom, red mud.

A fragmentary specimen of considerable size devoid of a head. It measures about 233 mm., with a breadth of 5·5 mm.

The body is comparatively flat throughout, and there is little to indicate tapering in the example. The dorsal wall of the body forms a flattened arch, while the ventral is marked by a deep groove. The anterior part of the fragment bears bifid branchiæ,